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FOR IMMEDIATE RELEASE

**ISSYS Inc. Awarded \$1.97 Million for the development of
MEMS-based, ultra-accurate, portable, multi-drug infusion systems**

Integrated Sensing Systems, Inc (ISSYS) in Ypsilanti, Michigan, announced today that it has been awarded \$1.97 million from the National Institute of Standards and Technology's Advanced Technology Program (NIST-ATP). The award ("*Multi-Drug, Portable Infusion System for the Treatment of Cancer & AIDS*") is dedicated to developing a portable and highly-accurate multi-drug infusion system that integrates the technology of microelectromechanical systems (MEMS) with a passively pressurized drug reservoir, thereby dramatically improving control of drug delivery and keeping power requirements low. Dr. Douglas Sparks, Executive VP of ISSYS and project's Principal Investigator, stated that the system will simultaneously or sequentially deliver up to 12 drugs in units of nano-liters to micro-liters and allow improved medication therapies to be implemented by reprogramming the delivery controls. More information is available at:

<http://jazz.nist.gov/atpcf/prjbriefts/prjbrief.cfm?ProjectNumber=00-00-5812>

While, many diseases require multiple drugs to be administered with high accuracy, two specific diseases are selected as testbeds: Cancer and AIDS. Cancer is treated with multi-drug chemotherapy and AIDS is treated with drug "cocktails." The need for multi-drug infusion has been met inadequately by existing infusion pumps because of shortcomings in their size, weight, accuracy, and power consumption.

According to Dr. Nader Najafi, ISSYS' CEO, ISSYS' technology represents a major paradigm shift and has the potential to revolutionize the low-flow delivery field by offering an unprecedented accuracy for low flow measurement in a small size and requiring very low power. ISSYS' core technology, for the first time, makes it possible to reliably produce intelligent, dynamic, programmable, low-volume, multi-fluid delivery systems at a reasonable cost.

William Beaumont Hospital, Royal Oak, Michigan, is working with ISSYS to design and test the proposed multi-drug infusion systems. Dr. Marcus Zervos, Director of Beaumont Research Institute, stated that "We are very excited to collaborate with ISSYS in developing the proposed drug infusion system, which has the potential to save millions of patients, particularly people affected by infectious diseases, and billions of dollars in hospitalization and insurance costs. We look forward to our continued working relationship with ISSYS in the pursuit of the enhanced treatment of other disease areas such as cardiology, urology and gastroenterology."

Jeff Mason, acting president and CEO of the Michigan Economic Development Corporation (MEDC), praised ISSYS for their award-winning work. "Integrated Sensing Systems is a pioneer in life saving MEMS technology and is acting as a key catalyst to the continued development of Michigan's microsystems industry," Mason said. "We congratulate

them on receiving this important funding and appreciate the company's continuing partnership with the state."

This system also measures the density of the drug which will be used to detect wrong medication, air bubbles, and drug flow occlusion. Complications with wrong medication are causing thousands of deaths per year that in many cases can be prevented by this emerging technology.

Furthermore, due to current low accuracy of flow measurement and delivery systems, the drugs need to be diluted, resulting in large size reservoirs and complicated pumps. The large size of drug reservoirs makes it impractical to have multiple-drug infusion systems (both portable and implantable systems). ISSYS' technology makes it safe and practical to utilize high potency drugs, resulting in:

- o Smaller drug reservoirs
- o Longer time between refilling the drug reservoirs
- o Use of multiple drugs
- o Use of much simpler sub-system-level parts, such as pumps and valves
- o Intelligent and dynamic drug delivery

Company Background: ISSYS is a leader in advanced micromachining technologies for medical devices, microfluidic and scientific analytical sensing applications. Founded in 1995 by world-renowned leaders in MEMS technology, ISSYS is one of the oldest independent MEMS companies in the US and has been offering MEMS services longer than any other company in the US. ISSYS operates a "full manufacturing under one roof," multi-million-dollar, state-of-the-art Bio-MEMS fabrication facility located near Ann Arbor, Michigan. ISSYS offers a high level of quality control standards required by invasive medical products (targeting FDA-compliant manufacturing and European Medical Device Manufacturing -- EN 4600 --, as well as ISO 9000). ISSYS is a vertically integrated company dedicated to developing and manufacturing system-level products based on MEMS technology (MEMS Inside). For more company, product and service information, please visit <http://www.mems-issys.com/>

ATP Background: The ATP provides cost-shared funding to industry-led teams which can include non-profits and universities to help advance particularly challenging, high-risk R&D projects that have the potential to spark important, broad-based economic or social benefits for the United States. The program supports projects that industry cannot fully fund on its own because of significant technical risks. ATP awards are made on the basis of rigorous, competitive peer review of the scientific and technical merit of each proposal. The program accelerates enabling technology research, but does not support product development work. Further information about ATP is available at www.atp.nist.gov.

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